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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/002,795 Filing Date: November 15, 2001 Appellant(s): REED ET AL.

> Steven T. McDonald For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed December 24, 2008 appealing from the Office action mailed June 24, 2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

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(8) Evidence Relied Upon

5,781,773 VANDERPOOL et al. 07-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 - 37 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,781,773 issued to Thomas Vanderpool et al. (hereinafter "Vanderpool").

With respect to claim 1, Vanderpool teaches a process for use in a database system (col. 2, lines 51-54, Fig. 1), comprising:

storing data (for search and display of data using a computer with an optical media read apparatus for communication with the computer includes providing a database stored on optical media which is accessible utilizing the computer, col. 2, lines 51-54) according to a first user-defined data type in a table (each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 3, lines 1-2);

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associating at least a first compression routine with the first user-defined data type (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field Of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 2, lines 63 to col. 3, lines 1- 2); and

using the first compression routine to compress the data according to the first user-defined data type (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 2, lines 63 to col. 3, lines 1- 2).

As to claim 2, Vanderpool teaches using a second compression routine, to compress (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. - Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields; col. 2, lines 63 - col. 3, lines 1- 2) the data to improve compression efficiency (the large data volume efficiently for transfer of all the data without errors; col. 7, lines 19-20).

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As to claim 3, Vanderpool teaches using the first and second compression routines comprises using user-defined data type methods (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 2, line 63 - col. 3, line 2).

As to claim 4, Vanderpool teaches using the user-defined data type methods comprises using methods built in with the first user-defined data type (each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 3, lines 1-2).

As to claim 5, Vanderpool teaches using the first compression routine comprises using a first compression method built in with the first user-defined data type

(the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 2, line 63 - col. 3, line 2 and col. 6, lines 37-38).

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As to claim 6, Vanderpool teaches providing a user-defined method executable to invoke the first compression method (with respect to the table driven merge program, the resulting commonly aligned property type data records and the commonly aligned tax data records are merged into a text record merge file by executable program, col. 8, lines 8-11).

As to claim 7, Vanderpool teaches invoking the user-defined method to invoke a second compression method built in with the first user-defined data type (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 2, line 63 - col. 3, line 2 and col. 6, lines 37-38).

As to claim 8, Vanderpool teaches invoking the user-defined method comprises invoking the user-defined method to alter compression efficiency (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 2, lines 63 to col. 3, lines 1-2 and col. 6, lines 37-38, and the large data volume efficiently for transfer of all the data without errors, col. 7, lines 19-20).

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As to claim 9, Vanderpool teaches providing a second user-defined data type built upon the first user-defined data type (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 2, lines 63 to col. 3, lines 1-2 and col. 6, lines 37-38).

As to claim 10, Vanderpool teaches storing a first type of data using the first user-defined data type and storing a second type of data using the second user defined data type (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image, col. 3, lines 38-40).

As to claim 11, Vanderpool teaches using a second compression routine to compress the second type of data (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, col. 2, lines 63 to col. 3, lines 1-2 and col. 6, lines 37-38).

As to claim 12, Vanderpool teaches inheriting at least a data structure and at least a built-in method from the first, user-defined data type into the second user defined data type (see col. 3, lines 39-40).

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With respect to claim 13, Vanderpool teaches an article comprising at least one storage medium containing instructions that when executed cause a system (col. 8, lines 8-11) to:

store data (for search and display of data using a computer with an optical media read apparatus for communication with the computer includes providing a database stored on optical media which is accessible utilizing the computer, see col. 2, lines 51-54) according to a first user-defined data type (each interface allows a user

to define a search query for a search parameter corresponding to one of the searchable data fields, see col. 3, lines 1-2); and

associate a first compression routine with the first user-defined data type for compressing the data (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, see col. 2, lines 63 to col. 3, lines 1-2 and col. 6, lines 37-38).

As to claim 14, Vanderpool teaches the instructions when executed cause the system to associate a second compression routine with the first user-defined data type, the first and second compression routines (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a

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search parameter corresponding to one of the searchable data fields, see col. 2, lines 63 to col. 3, lines 1-2 and col. 6, lines 37-38) providing different compression algorithms (the user search and display software, decompression software for both decompressing the main image in accordance with the JPEG standard and the thumbnail image in accordance with the compression algorithm, and other user interface software such as that necessary for permitting use of mouse and display controls, see col. 9, lines 19-23).

As to claim 15, Vanderpool teaches the instructions when executed cause the "system to provide the first compression routine as a method built in with the first user-defined data type (with respect to the table driven merge program, the resulting commonly aligned property type data records and the commonly aligned tax data records are merged into a text record merge file by executable program, see col. 8, lines 8-11 and col. 2, lines 51-54).

As to claim 16, Vanderpool teaches the instructions when executed cause the system to provide the second compression routine as a method built in with the first user-defined data type (with respect to the table driven merge program, the resulting commonly aligned property type data records and the commonly aligned tax data records are merged into a text record merge file by executable program, see col. 8, lines 8-11 and col. 2, lines 51-54).

As to claim 17, Vanderpool teaches the instructions when executed (with respect to the table driven merge program, the resulting commonly aligned property type data

records and the commonly aligned tax data records are merged into a text record merge file by executable program, see col. 8, lines 8-11 and col. 2, lines 51-54) cause

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the system to associated a first data structure with the first user- defined data type, the first data structure to indicate a type of compression applied on a data object (see col. 2, lines 63 to col. 3, lines 1-2 and col. 6, lines 37-38).

As to claim 18, Vanderpool teaches the instructions when executed cause the system to associate a second data structure with the first user-defined data type (with respect to the table driven merge program, the resulting commonly aligned property

type data records and the commonly aligned tax data records are merged into a text record merge file by executable program, see col. 8, lines 8-11 and col. 2, lines 51-54), the second data structure to indicate a percentage amount of compression of the data object (the compressed image data includes at least a first compressed " image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, see col. 2, lines 63 to col. 3, lines 1-2 and col. 6, lines 37-38 and col. 8, lines 16-20).

As to claim 19, Vanderpool teaches the instructions when executed cause the system to access (with respect to the table driven merge program, the resulting commonly •aligned .property type data records and the commonly aligned tax data records are merged into a text record merge file by executable program, see col. 8, lines 8-11 and col. 2, lines 51-54) the first and second data structures of the data object when accessing the data object (col. 8, lines 16-20).

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As to claim 20, Vanderpool teaches the instructions when executed cause the system to store the data object in a relational table (see col. 10, lines 10-26).

As to claim 21, Vanderpool teaches the instructions when executed cause the system to store the data object in a relational table distributed across multiple access modules (see col. 8, lines 8-11 and coil 2, lines 51-54).

As to claim 22, Vanderpool teaches the instructions when executed cause the system to provide a second user-defined data type built upon the first user-defined data type (see col. 8, lines 8-11 and col. 2, lines 51-54).

As to claim 23, Vanderpool teaches the instructions when executed cause the system to provide a second user-defined data type built upon the first user-defined data type (see col. 11, lines 35-39).

As to claim 24, Vanderpool teaches the instructions when executed cause the system to inherit the first compression routine from the first user-defined data type into the second user-defined data type (see col. 2, lines 63 to col. 3, lines 1-2 and col. 6, lines 37-38).

As to claim 25, Vanderpool teaches the instructions when executed (see col. 11, lines 35-39) cause the system to. associate a second compression routine with the first user-defined data type (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter

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corresponding to one of the searchable data fields, see col. 2, lines 63 to col. 3, lines 1-2); and

inherit the second compression routine from the first user-defined data type into the second user-defined data type (see col. 2, lines 63 to col. 3, lines 1-2).

As to claim 26, Vanderpool teaches the instructions when executed cause the system to: store a first type of data using the first user-defined data type (see col. 2, lines 63 to col. 3, lines 1-2); and

store a second type of data using the second user-defined data type (see col. 2, lines 63 to col. 3, lines 1-2).

With respect to claim 27, Vanderpool teaches a database system (see col. 2, lines 51-54), comprising:

a storage system (for search and display of data using a computer with an optical media read apparatus for communication with the computer includes providing a database stored on optical media which is accessible utilizing the computer, see col. 2, lines 51-54) to store at least a table (each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, see col. 3, lines 1-2);

a plurality of compression routines to apply respective different compression algorithms (the user search and display Software, decompression software for both decompressing the main image in accordance with the JPEG standard and the thumbnail image in accordance with the compression algorithm, and other user

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interface software such as that necessary for permitting use of mouse and display controls, see col. 9, lines 19-23); and

a controller adapted to invoke one of plurality of compression routines to compress data stored in the table (the compressed image data includes at least a first compressed image and a second compressed image of lesser resolution than the first

compressed image. An interface is displayed for at least one searchable data field of the plurality of text fields. Each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields, see col. 2, lines 63 to col. 3, lines 1-2).

As to claim 28, Vanderpool teaches the table includes a relational table and the data is stored in a first attribute of the relational table (see col. 8, lines 8-11 and col, 2, lines 51-54).

As to claim 29, Vanderpool teaches the first attribute is according to a first userdefined data type (see col. 8, lines 8-11 and col. 2, lines 51-54).

As to claim 30, Vanderpool teaches the plurality of compression routines are methods built in with the first user-defined data type (see col. 8, lines 8-11 and col. 2, lines 51-54).

As to claim 31, Vanderpool teaches the storage system to store a second table having a second attribute according, to a second user-defined data type built upon the first user-defined data type (see col. 8, lines 8-11 and col. 2, lines 51-54).

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As to claim 32, Vanderpool teaches the controller is adapted to invoke another one of the compression routines to alter compression of the data (see col. 8, lines 8-11 and col. 2, lines 51-54).

As to claim 33, Vanderpool teaches the controller is adapted to invoke another one of the compression routines in response to a. Structured Query Language UPDATE statement (see col. 10, lines 15-17 et seq.).

As to claim 34, Vanderpool teaches the controller comprises a user-defined method (see col. 3, lines 26-27).

As to claim 35, Vanderpool teaches the plurality of compression routines comprise methods built in with the first user-defined data type the user-defined method executable to invoke the methods built in with the first user-defined data type (see col. 8, lines 8-11 and col. 2, lines 51 - 54).

As to claim 36, Vanderpool teaches comprising a plurality of access modules adapted to manage access to respective portions of the storage system (see col. 10, lines 21-23).

As to claim 37, Vanderpool teaches the table is distributed across multiple access modules (see col. 9, lines 61-64).

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(10) Response to Argument

Appellant's arguments regarding the rejection of claims 1 - 37:

Argument A: Vanderpool is wholly silent with regard to storage of data according to a user-defined data type (Page 9. The Brief).

Argument B: The interpretation of a query as a user-defined data type is clearly inconsistent with the plain meaning of the term "user-defined data type" (Page 10, The Brief).

Argument C: Vanderpool does not disclose a system that includes "a plurality of compression routines to apply respective different compression algorithms" (Page 14, The Brief).

Examiner's Response to Arguments:

In response to argument A:

In response to appellant's argument, Vanderpool teaches a system and method of transforming and storing data for search and display thereof includes providing image data for a plurality of objects with each object associated with a corresponding identifier of a plurality of identifiers. At least one group of textual data records for the plurality of objects associated with corresponding identifiers is also provided with each group of textual data records including data records having a same or different table mapped format. The database includes a plurality of index tables at least in part corresponding to searchable data fields of the plurality of data fields of the textual files. The image data for each of the plurality of objects is compressed resulting in at least

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one <u>compressed</u> image for each object, if an image for the object is available, and the at least one <u>compressed</u> image for each object is stored to the master optical disc as a function of the identifier. A program for manipulating the stored image <u>data</u> and textual <u>data</u> is also stored on the master optical disc with the database and images. Various <u>user defined</u> inputs are provided to the database builder. Such <u>user-defined</u> inputs may include: lists of the fields of the various commonly formatted <u>data</u> which the database builder is to index in <u>table</u> form; list of fields to be used as summary <u>data</u>; and the <u>data</u> to be used as tax data (see column 2, "Summary of the Invention).

Examiner is entitled to give claim limitations their broadest reasonable interpretation in light of the specification. See MPEP 2111 [R-1]

Interpretation of Claims-Broadest Reasonable Interpretation

During patent examination, the pending claims must be 'given the broadest reasonable interpretation consistent with the specification.' Applicant always has the opportunity to amend the claims during prosecussion and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 162 USPQ 541,550-51 (CCPA 1969).

In response to argument B:

In response to appellant's argument that the interpretation of a query as a userdefined data type is clearly inconsistent with the plain meaning of the term "user-defined data type", examiner disagrees. This is a misrepresentation of examiner's statement. The statement made by the examiner is in claim language as described above. For

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example of storing data, examiner wrote, for search and display of data using a computer with an optical media read apparatus for communication with the computer includes providing a database stored on optical media which is accessible utilizing the computer and cited column 2, lines 51 - 54 and for "according to a first user-defined data type in a table", examiner wrote each interface allows a user to define a search query for a search parameter corresponding to one of the searchable data fields and cited column 3, lines 1 - 2. Defining a search query for a search parameter using data fields equates user-defined data. The text record merge file and listing number file are applied to a database builder program. In addition, various user defined inputs are provided to the database builder. Such user-defined inputs may include: lists of the fields of the various **commonly formatted data which the database builder is to index** in table form; list of fields to be used as summary data; and the data to be used as tax data (column 6, lines 36 - 41).

To support, Appellant's disclosure teaches to extract data from, or to update, a relational table, queries according to a standard database query language are used (e.g., Structured Query Language or SQL). SQL-99 defines several data types, including predefined data types and user-defined data types (UDTs). User-defined data types are set by an application, a database management system, or by another standard. With the advent of user-defined data types, more complex data objects can be stored in relational tables. Examples of complex objects include video data, image data, audio data, formatted documents, multimedia data, and so forth (see instant specification, Page 1).

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For the above citation, examiner concluded that Vanderpool teaches userdefined data types as arqued.

In response to argument C:

In response to appellant's argument, Vanderpool teaches that the computer system copies from memory to the master media or master CD-ROM, image files and supplemental text files. The main image may be provided to the system as a compressed image or an uncompressed image. In any case, the multiple images are compressed. In one embodiment of the invention, this compression, is performed in accordance with a JPEG standard subsystem. These compressed images are shown as main compressed image and compressed supplemental images. Any compression and decompression described herein are performed with the use of compression utilities, such as Lead Tools compression utilities available from Lead Technologies, Inc (column 7, lines 30-43).

The image <u>data</u> for each of the plurality of objects is <u>compressed</u> resulting in at least one <u>compressed</u> image for each object, if an image for the object is available, and the at least one <u>compressed</u> image for each object is stored to the master optical disc as a function of the identifier. A program for manipulating the stored image <u>data</u> and textual <u>data</u> is also stored on the master optical disc with the database and images.

For the above citation, examiner concluded that Vanderpool teaches a plurality of compression routines as argued.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Shahid Al Alam/

Primary Examiner, Art Unit 2162

Conferees:

/Mohammad Ali/

Supervisory Patent Examiner, Art Unit 2158

/John Breene/

Supervisory Patent Examiner, Art Unit 2162